



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

February 20, 2004

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Buckeye Terminals, LLC / F 141-15854-00139

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot 9/16/03



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## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY

**Buckeye Terminals, LLC - South Bend Terminal**  
**20630 West Ireland Road**  
**South Bend, Indiana 46614**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

**The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.**

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 141-15854-00139	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 20, 2004  Expiration Date: February 20, 2009

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary bulk gasoline terminal.

Authorized individual:	Vice President and General Manager
Source Address:	20630 West Ireland Road, South Bend, Indiana 46614
Mailing Address:	P.O. Box 368, Emmaus, Pennsylvania 18049
General Source Phone:	574-299-1641
SIC Code:	5171
Source Location Status:	St. Joseph County
	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP)
	Minor Source, under PSD Rules;
	Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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This stationary source consists of the following emission units and pollution control devices:

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) loading bay area, identified as A-1, consisting of one (1) loading rack with six (6) loading arms of which four (4) can operate at any one (1) time, identified as north, constructed in 1996, capacity: 630,720,000 gallons per year, total.

This loading bay area is equipped with the following:

- (1) Six (6) loading arms, identified as N<sub>1</sub> through N<sub>6</sub>, capacity: 600 gallons of petroleum products and/or denatured ethanol per minute each, and
- (2) One (1) vapor collection system for VOC control, vented to one (1) natural gas-fired vapor combustion unit, identified as VCU, rated 0.055 million British thermal units per hour.

- (b) One (1) loading bay area, identified as A-2, consisting of one (1) loading rack with six (6) loading arms of which four (4) can operate at any one (1) time, identified as south, constructed in 1996, capacity: 630,720,000 gallons per year, total.

This loading bay area is equipped with the following:

- (1) Six (6) loading arms, identified as S<sub>1</sub> through S<sub>6</sub>, capacity: 600 gallons of petroleum products and/or denatured ethanol per minute each, and
- (2) One (1) vapor collection system for VOC control, vented to one (1) natural gas-fired

vapor combustion unit, identified as VCU, rated 0.055 million British thermal units per hour.

- (c) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 701, constructed in 1947, capacity: 840,000 gallons.
- (d) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 702, constructed in 1947, capacity: 729,246 gallons.
- (e) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 704, constructed in 1946, capacity: 420,000 gallons.
- (f) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 711, constructed in 1947, capacity: 798,000 gallons.
- (g) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 712, constructed in 1946, capacity: 420,000 gallons.
- (h) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 714, constructed in 1946, capacity: 420,000 gallons.
- (i) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 722, constructed in 1951, capacity: 2,299,962 gallons.
- (j) One (1) vertical above ground, fixed roof distillate (any petroleum product with a vapor pressure less than 1.5 psia) storage tank, identified as Tank # 732, constructed in 1951, capacity: 2,299,962 gallons.
- (k) One (1) vertical above ground, fixed roof distillate (any petroleum product with a vapor pressure less than 1.5 psia) storage tank, identified as Tank # 703, constructed in 1947, capacity: 420,000 gallons.
- (l) One (1) horizontal above ground, fixed roof, fuel additive storage tank, identified as Tank # 100, constructed in 1996, capacity: 8,000 gallons.
- (m) One (1) horizontal above ground, fixed roof, fuel additive storage tank, identified as Tank # 101, constructed in 1996, capacity: 8,000 gallons.
- (n) One (1) vertical above ground, fixed roof denatured ethanol storage tank, identified as Tank # 102, constructed in 1996, capacity: 20,000 gallons.
- (o) One (1) vertical above ground, fixed roof denatured ethanol storage tank, identified as Tank # 103, constructed in 2001, capacity: 20,000 gallons.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) natural gas-fired space heaters, heat input capacity: 0.080 million British thermal units per hour, each.
- (b) Process piping, containing pumps, flanges, valves, and other processes.

- (c) One (1) oil/water separator, capacity: 3,000 gallons.



A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

## **SECTION B GENERAL CONDITIONS**

### **B.1 Permit No Defense [IC 13]**

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

### **B.2 Definitions [326 IAC 2-8-1]**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

### **B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]**

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

### **B.4 Enforceability [326 IAC 2-8-6]**

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### **B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]**

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

### **B.6 Severability [326 IAC 2-8-4(4)]**

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]**

This permit does not convey any property rights of any sort, or any exclusive privilege.

### **B.8 Duty to Provide Information [326 IAC 2-8-4(5)(E)]**

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

### **B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]**

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

**B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]**

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

**B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.13 Emergency Provisions [326 IAC 2-8-12]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ Northern Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967  
Northern Regional Office: 574-245-4870, facsimile 574-245-4877

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

- (h) Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which

cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.16 Permit Renewal [326 IAC 2-8-3(h)]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]  
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.





**B.18 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]**

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) **Emission Trades [326 IAC 2-8-15(c)]**  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

- (c) **Alternative Operating Scenarios [326 IAC 2-8-15(d)]**  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

**B.19 Permit Revision Requirement [326 IAC 2-8-11.1]**

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

**B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]**

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]**

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

**B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]**

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

<b>Entire Source</b>
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### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

#### C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

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The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

**C.5 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

**C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]**

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

**C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-

4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Demolition and renovation  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

### **Testing Requirements [326 IAC 2-8-4(3)]**

#### **C.8 Performance Testing [326 IAC 3-6]**

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.9 Compliance Requirements [326 IAC 2-1.1-11]**

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**



**C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

Unless otherwise specified in this permit, all monitoring and recordkeeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

**C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

**C.12 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]**

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.
- (d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

**C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]**

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

**C.14 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]**

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" para-

meters and no response steps are required.

- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]  
[326 IAC 2-8-5]**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

**C.16 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]**

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- (a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

**C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all recordkeeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

**Stratospheric Ozone Protection**

**C.19 Compliance with 40 CFR 82 and 326 IAC 22-1**

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]: North and South Loading Racks

- (a) One (1) loading bay area, identified as A-1, consisting of one (1) loading rack with six (6) loading arms of which four (4) can operate at any one (1) time, identified as north, constructed in 1996, capacity: 630,720,000 gallons per year, total.

This loading bay area is equipped with the following:

- (1) Six (6) loading arms, identified as N<sub>1</sub> through N<sub>6</sub>, capacity: 600 gallons of petroleum products and/or denatured ethanol per minute each, and
- (2) One (1) vapor collection system for VOC control, vented to one (1) natural gas-fired vapor combustion unit, identified as VCU, rated 0.055 million British thermal units per hour.

- (b) One (1) loading bay area, identified as A-2, consisting of one (1) loading rack with six (6) loading arms of which four (4) can operate at any one (1) time, identified as south, constructed in 1996, capacity: 630,720,000 gallons per year, total.

This loading bay area is equipped with the following:

- (1) Six (6) loading arms, identified as S<sub>1</sub> through S<sub>6</sub>, capacity: 600 gallons of petroleum products and/or denatured ethanol per minute each, and
- (2) One (1) vapor collection system for VOC control, vented to one (1) natural gas-fired vapor combustion unit, identified as VCU, rated 0.055 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the north and south loading racks described in this section except when otherwise specified in 40 CFR Part 60.500, Subpart XX.

#### D.1.2 Standard for Volatile Organic Compound (VOC) Emissions From Bulk Gasoline Terminals, Subpart XX [40 CFR 60.502] [326 IAC 12-1]

The Permittee of each bulk gasoline terminal containing an affected facility shall comply with the following requirements:

- (a) Each affected facility shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading.
- (b) The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed thirty-five (35) milligrams of total organic compounds per liter of gasoline loaded.
- (c) Each vapor collection system shall be designed to prevent any total organic compounds

vapors collected at one loading rack from passing to another loading rack.

- (d) Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:
  - (1) The Permittee shall obtain the vapor tightness documentation described in 40 CFR 60.505(b) for each gasoline tank truck which is to be loaded at the affected facility.
  - (2) The Permittee shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility.
  - (3) The Permittee shall cross-check each tank identification number obtained in paragraph (d)(2) with the file of tank vapor tightness documentation within two (2) weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:
    - (A) If less than an average of one gasoline tank truck per month over the last twenty-six (26) weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or
    - (B) If less than an average of one gasoline tank truck per month over the last fifty-two (52) weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.

If either the quarterly or semiannual cross-check provided in paragraphs (d)(3) (A) and (B) reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met.

  - (4) The terminal Permittee shall notify the Permittee of each non-vapor-tight gasoline tank truck loaded at the affected facility within one (1) week of the documentation cross-check in paragraph (d)(3) of this section.
  - (5) The terminal Permittee shall take steps assuring that the nonvapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained.
  - (6) Alternate procedures to those described in paragraphs (d)(1) through (5) for limiting gasoline tank truck loadings may be used upon application to, and approval by, the Administrator.
- (e) The Permittee shall act to assure that loadings of gasoline tank trucks at the affected facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.
- (f) The Permittee shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks.
- (g) The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified

in 40 CFR 60.503(d).

- (h) No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).
- (i) Each calendar month, the vapor collection system, the vapor processing system, and each loading rack arm handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within fifteen (15) calendar days after it is detected.

**D.1.3 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4] [40 CFR 63, Subpart R] [326 IAC 20] [326 IAC 2-2]**

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Pursuant to 326 IAC 2-8-4, the following emission limitations apply:

- (a) The total throughput of petroleum products with true vapor pressures of 1.50 psia or greater and/or denatured ethanol at the north and south loading racks shall be limited to a total of 245,000,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month at an emission rate of 0.367 pounds per thousand (1,000) gallons, equivalent to 45.0 tons of VOC per year. This throughput in combination with the emission factor limits the potential to emit VOC from the entire source to less than one hundred (100) tons per year.
- (b) This throughput also limits the potential to emit of any individual HAP to a total of 1.99 tons per year, any combination of HAPs to a total of 4.97 tons per year from the loading racks and less than ten (10) tons per year for each individual HAP and twenty-five (25) tons per year of any combination of HAPs from the entire source.

Compliance with these emission limits in combination with the emission limits in Condition D.2.1 shall render the requirements of 326 IAC 2-7, 326 IAC 20-1, 40 CFR 63, Subpart R, and 326 IAC 2-2 not applicable.

**D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-4-4]**

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Pursuant to 326 IAC 8-4-4 (Bulk gasoline terminals):

- (a) No Permittee of a bulk gasoline terminal shall permit the loading of gasoline into any transport, excluding railroad tank cars, or barges, unless:
  - (1) The bulk gasoline terminal is equipped with a vapor control system, in good working order, in operation and consisting of one of the following:
    - (A) An adsorber or condensation system which processes and recovers vapors and gases from the equipment being controlled, releasing no more than 80 milligrams per liter of VOC to the atmosphere.
    - (B) A vapor collection system which directs all vapors to a fuel gas system or incinerator.
    - (C) An approved control system, demonstrated to have control efficiency equivalent to or greater than (A) above.



- (2) Displaced vapors and gases are vented only to the vapor control system.
  - (3) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.
  - (4) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which will be closed upon disconnection.
- (b) If employees of the owner of the bulk gasoline terminal are not present during loading, it shall be the responsibility of the owner of the transport to make certain the vapor control system is attached to the transport. The owner of the terminal shall take all reasonable steps to insure that owners of transports loading at the terminal during unsupervised times comply with this section.

#### D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-4-7]

Pursuant to 326 IAC 8-4-7 (petroleum sources; gasoline transports), the source and transports at this source shall comply with the following requirements:

- (a) No owner or operator of a gasoline transport shall cause, allow, or permit the transfer of gasoline between transports and storage tanks that are equipped with a vapor balance system or vapor recovery system unless:
- (1) the vapor balance system or vapor recovery system is connected and operating according to manufacturers' specifications;
  - (2) gasoline transport compartment hatches are closed at all times during loading operations;
  - (3) except as provided in Condition D.1.5(f), there are no visible leaks, or otherwise detectable leaks (measured at twenty-one thousand (21,000) parts per million as propane as specified in 40 CFR 63.425(f)(1)), in the gasoline transport's pressure/vacuum relief valves, hatch cover, trailer compartments, storage tanks, or associated vapor and liquid lines during loading or unloading; and
  - (4) the pressure relief valves on gasoline transports are set to release at no less than four and eight-tenths (4.8) kilo Pascals (seven-tenths (0.7) pounds per square inch).
- (b) Tank wagons are exempt from vapor balance requirements.
- (c) When employees of the owner of a bulk gasoline terminal are present to supervise or perform loading, the owner of the terminal shall be responsible for compliance with subsection (a)(1) through (a)(3). The owner of the terminal shall also ensure that owners of gasoline transports loading at the terminal during unsupervised times comply with this section.
- (d) Gasoline transports must be designed, maintained, and operated so as to be vapor-tight.
- (e) Transfer of gasoline between a gasoline transport and a storage tank that is not equipped with a vapor balance system or vapor recovery system is not subject to this section.

#### D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-4-9]

Pursuant to 326 IAC 8-4-9 (Leaks from transports and vapor collection systems, records) the source will operate a vapor control system. The requirements are as follows:

- (a) No person shall allow a gasoline transport that is subject to this rule and that has a capacity of two thousand (2,000) gallons or more to be filled or emptied unless the gasoline transport completes the following:
  - (1) Annual leak detection testing before the end of the twelfth calendar month following the previous year's test, according to test procedures contained in 40 CFR 63.425 (e), as follows:
    - (A) Conduct the pressure and vacuum tests for the transport's cargo tank using a time period of five (5) minutes. The initial pressure for the pressure test shall be four hundred sixty (460) millimeters H<sub>2</sub>O (eighteen (18) inches H<sub>2</sub>O) gauge. The initial vacuum for the vacuum test shall be one hundred fifty (150) millimeters H<sub>2</sub>O (six (6) inches H<sub>2</sub>O) gauge. The maximum allowable pressure or vacuum change is twenty-five (25) millimeters H<sub>2</sub>O (one (1) inch H<sub>2</sub>O) in five (5) minutes.
    - (B) Conduct the pressure test of the cargo tank's internal vapor valve as follows:
      - (i) After completing the test under clause (A), use the procedures in 40 CFR 60, Appendix A, Method 27 to repressurize the tank to four hundred sixty (460) millimeters H<sub>2</sub>O (eighteen (18) inches H<sub>2</sub>O) gauge. Close the transport's internal vapor valve or valves, thereby isolating the vapor return line and manifold from the tank.
      - (ii) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five (5) minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five (5) minute pressure increase is one hundred thirty (130) millimeters H<sub>2</sub>O (five (5) inches H<sub>2</sub>O).
  - (2) Repairs by the gasoline transport owner or operator, if the transport does not meet the criteria of subdivision (1), and retesting to prove compliance with the criteria of subdivision (1).
- (b) The annual test data remain valid until the end of the twelfth calendar month following the test. The owner of the gasoline transport shall be responsible for compliance with subsection (b) and shall provide the owner of the loading facility with the most recent valid modified 40 CFR 60, Appendix A, Method 27 test results upon request. The owner of the loading facility shall take all reasonable steps, including reviewing the test date and tester's signature, to ensure that gasoline transports loading at its facility comply with subsection (a).
- (c) The Permittee shall:
  - (1) design and operate the applicable system and the gasoline loading equipment in a manner that prevents:
    - (A) gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen (18) inches of H<sub>2</sub>O) and a vacuum from exceeding one thousand five hundred (1,500) pascals (six (6) inches of H<sub>2</sub>O) in the gasoline transport;
    - (B) a reading equal to or greater than twenty-one thousand (21,000) parts per million as propane, from all points on the perimeter of a potential leak source

when measured by the method referenced in 40 CFR 60, Appendix A, Method 21\*, or an equivalent procedure approved by the commissioner during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and

- (C) avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals.
- (2) within fifteen (15) days, repair and retest a vapor balance, collection, or control system that exceeds the limits in subdivision (1).
- (d) The department may, at any time, monitor a gasoline transport, vapor balance, or vapor control system to confirm continuing compliance with (a).
- (e) If the commissioner allows alternative test procedures, such method shall be submitted to the U.S. EPA as a SIP revision.
- (f) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in subsection (c)(1)(B). Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

#### D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the north and south loading racks and the vapor collection systems with the vapor combustion unit (VCU).

### **Compliance Determination Requirements**

#### D.1.8 VOC and HAPs

In order to comply with Conditions D.1.2, through D.1.4 and D.1.6, the vapor combustion unit (VCU) with the vapor collection systems for VOC and HAPs control shall be in operation and control emissions from the north and south loading racks at all times petroleum products and/or denatured ethanol is being loaded.

#### D.1.9 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) To demonstrate compliance with Conditions D.1.2 and D.1.3, a compliance stack test shall be performed by July 11, 2007 which corresponds to five (5) years since the latest valid stack test at the vapor combustion unit (VCU) with the vapor control systems. This test shall be performed according to 40 CFR 60, Appendix A, Methods 25 and 25A as well as the procedures in Condition D.1.10.
- (b) To demonstrate compliance with Condition D.1.6, the Permittee shall perform testing required in Condition D.1.6.
- (c) If the commissioner allows alternative test procedures in (c)(1)(B) of Condition D.1.6, such method shall be submitted to the U.S. EPA as a SIP revision.
- (d) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in (c)(1)(B) of Condition D.1.6.

Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

#### D.1.10 Test Methods and Procedures, Subpart XX [40 CFR 60.503] [326 IAC 12-1]

- (a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures the test methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b). The three-run requirement of 40 CFR 60.8(f) does not apply to this subpart.
- (b) Immediately before the performance test required to determine compliance with 40 CFR 60.502 (b), (c), and (h), the Permittee shall use Method 21 to monitor for leakage of vapor all potential sources in the terminal's vapor collection system equipment while a gasoline tank truck is being loaded. The Permittee shall repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test.
- (c) The Permittee shall determine compliance with the standards in 40 CFR 60.502 (b) and (c) as follows:
  - (1) The performance test shall be six (6) hours long during which at least 300,000 liters of gasoline is loaded. If this is not possible, the test may be continued the same day until 300,000 liters of gasoline is loaded or the test may be resumed the next day with another complete six (6)-hour period. In the latter case, the 300,000-liter criterion need not be met. However, as much as possible, testing should be conducted during the six (6)-hour period in which the highest throughput normally occurs.
  - (2) If the vapor processing system is intermittent in operation, the performance test shall begin at a reference vapor holder level and shall end at the same reference point. The test shall include at least two startups and shutdowns of the vapor processor. If this does not occur under automatically controlled operations, the system shall be manually controlled.
  - (3) The emission rate (E) of total organic compounds shall be computed using the following equation:

$$E = K \sum_{i=1}^n \frac{V_{esi} C_{ei}}{L \cdot 10^6}$$

where: E = emission rate of total organic compounds, mg/liter of gasoline loaded.

$V_{esi}$  = volume of air-vapor mixture exhausted at each interval "i", scm.

$C_{ei}$  = concentration of total organic compounds at each interval "i", ppm.

L = total volume of gasoline loaded, liters.

n = number of testing intervals.

i = emission testing interval of five (5) minutes.

$K =$  density of calibration gas,  $1.83 \times 10^6$  for propane and  $2.41 \times 10^6$  for butane, mg/scm.

- (4) The performance test shall be conducted in intervals of five (5) minutes. For each interval "i", readings from each measurement shall be recorded, and the volume exhausted ( $V_{esi}$ ) and the corresponding average total organic compounds concentration ( $C_{ei}$ ) shall be determined. The sampling system response time shall be considered in determining the average total organic compounds concentration corresponding to the volume exhausted.
  - (5) The following methods shall be used to determine the volume ( $V_{esi}$ ) air-vapor mixture exhausted at each interval:
    - (A) Method 2B shall be used for combustion vapor processing systems.
    - (B) Method 2A shall be used for all other vapor processing systems.
  - (6) Method 25A or 25B shall be used for determining the total organic compounds concentration ( $C_{ei}$ ) at each interval. The calibration gas shall be either propane or butane. The Permittee may exclude the methane and ethane content in the exhaust vent by any method (e.g., Method 18) approved by the Administrator.
  - (7) To determine the volume (L) of gasoline dispensed during the performance test period at all loading racks whose vapor emissions are controlled by the processing system being tested, terminal records or readings from gasoline dispensing meters at each loading rack shall be used.
- (d) The Permittee shall determine compliance with the standard in 40 CFR 60.502(h) as follows:
- (1) A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with  $\pm 2.5$  mm of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.
  - (2) During the performance test, the pressure shall be recorded every five (5) minutes while a gasoline truck is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.

#### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

##### **D.1.11 Vapor Combustion Unit Operation**

To document compliance with Conditions D.1.2 and D.1.3, during times when the Permittee is present, the Permittee shall perform daily checks of the pilot flame presence at the vapor combustion unit (VCU).

##### **D.1.12 Operation and Maintenance Plan**

The Permittee shall prepare and maintain an Operation and Maintenance Plan for the vapor combustion unit (VCU). This plan shall insure that the VCU is operated and maintained properly in accordance with manufacturer's specifications and good air pollution control practices for minimizing emissions. The Operation and Maintenance Plan shall be kept onsite at all times.

## **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

### **D.1.13 Record Keeping Requirements [326 IAC 2-8-4] [326 IAC 8-4-9]**

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- (a) To document compliance with Condition D.1.3, the Permittee shall maintain records at the source of the volume (in gallons) of each fuel received, including purchase orders and invoices necessary to verify the type and amount used;
- (b) To document compliance with Condition D.1.4, the owner or operator of a vapor balance or vapor control system subject to this section shall maintain records of all certification testing. The records shall identify the following:
  - (1) The vapor balance, vapor collection, or vapor control system.
  - (2) The date of the test and, if applicable, retest.
  - (3) The results of the test and, if applicable, retest.

The records shall be maintained in a legible, readily available condition for at least two (2) years after the date the testing and, if applicable, retesting were completed.

- (c) To document compliance with Condition D.1.4, the owner or operator of a gasoline transport subject to this section shall keep a legible copy of the transport's most recent valid annual modified 40 CFR 60, Appendix A, Method 27 test either in the cab of the transport or affixed to the transport trailer. The test record shall identify the following:
  - (1) The gasoline transport.
  - (2) The type and date of the test and, if applicable, date of retest.
  - (3) The test methods, test data, and results certified as true, accurate, and in compliance with this rule by the person who performs the test.

This copy shall be made available immediately upon request to the department and to the owner of the loading facility for inspection and review. The department shall be allowed to make copies of the test results.

- (d) To document compliance with Condition D.1.6, the Permittee shall maintain records of the following:
  - (1) Certification testing required under Condition D.1.6(e), and
  - (2) Test required under Condition D.1.6(f).
- (e) To document compliance with Condition D.1.3, the Permittee shall maintain records at the terminal of the materials used that contain any HAPs. The records shall be complete and sufficient to establish compliance with the HAP emission limits in Condition D.1.3. The records shall contain a minimum of the following:
  - (1) The HAP/VOC ratio of each fuel received;
  - (2) The weight of VOC, individual HAPs and total HAPs emitted for each compliance period, considering capture and control efficiency, if applicable; and

- (3) Identification of the facility or facilities associated with the usage of each HAP.
- (f) To document compliance with Condition D.1.11, on days in which the Permittee is present, the Permittee shall maintain records of the pilot flame presence when the vapor combustion unit (VCU) is in use.
- (g) To document compliance with Condition D.1.12, the Permittee shall keep records of the maintenance performed on the vapor combustion unit (VCU) including the date and description of the maintenance activities.
- (h) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.14 NSPS Reporting Requirement [326 IAC 12-1] [Subpart XX, 40 CFR 60.500]

Pursuant to the New Source Performance Standards (NSPS), 40 CFR Part 60.500, Subpart XX, the Permittee is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Actual start-up date (within 15 days after such date); and
- (c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

D.1.15 Reporting and Record Keeping [Subpart XX, 40 CFR 60.505] [326 IAC 12-1]

- (a) The tank truck vapor tightness documentation required under 40 CFR 60.502(e)(1) shall be kept on file at the terminal in a permanent form available for inspection.
- (b) The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include, as a minimum, the following information:
  - (1) Test title: Gasoline Delivery Tank Pressure Test--EPA Reference Method 27.
  - (2) Tank owner and address.
  - (3) Tank identification number.
  - (4) Testing location.
  - (5) Date of test.

- (6) Tester name and signature.
  - (7) Witnessing inspector, if any: Name, signature, and affiliation.
  - (8) Test results: Actual pressure change in 5 minutes, mm of water (average for two (2) runs).
- (c) A record of each monthly leak inspection required under 40 CFR 60.502(j) shall be kept on file at the terminal for at least two (2) years. Inspection records shall include, as a minimum, the following information:
- (1) Date of inspection.
  - (2) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).
  - (3) Leak determination method.
  - (4) Corrective action (date each leak repaired; reasons for any repair interval in excess of fifteen (15) days).
  - (5) Inspector name and signature.
- (d) The Permittee shall keep documentation of all notifications required under 40 CFR 60.502 (e)(4) on file at the terminal for at least two (2) years.
- (e) The Permittee of an affected facility shall keep records of all replacements or additions of components performed on an existing vapor processing system for at least three (3) years.

#### D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.



## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]: Twelve (12) storage tanks

- (c) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 701, constructed in 1947, capacity: 840,000 gallons.
- (d) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 702, constructed in 1947, capacity: 729,246 gallons.
- (e) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 704, constructed in 1946, capacity: 420,000 gallons.
- (f) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 711, constructed in 1947, capacity: 798,000 gallons.
- (g) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 712, constructed in 1946, capacity: 420,000 gallons.
- (h) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 714, constructed in 1946, capacity: 420,000 gallons.
- (i) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 722, constructed in 1951, capacity: 2,299,962 gallons.
- (j) One (1) vertical above ground, fixed roof distillate (any petroleum product with a vapor pressure less than 1.5 psia) storage tank, identified as Tank # 732, constructed in 1951, capacity: 2,299,962 gallons.
- (k) One (1) vertical above ground, fixed roof distillate (any petroleum product with a vapor pressure less than 1.5 psia) storage tank, identified as Tank # 703, constructed in 1947, capacity: 420,000 gallons.
- (l) One (1) horizontal above ground, fixed roof, fuel additive storage tank, identified as Tank # 100, constructed in 1996, capacity: 8,000 gallons.
- (m) One (1) horizontal above ground, fixed roof, fuel additive storage tank, identified as Tank # 101, constructed in 1996, capacity: 8,000 gallons.
- (n) One (1) vertical above ground, fixed roof denatured ethanol storage tank, identified as Tank # 102, constructed in 1996, capacity: 20,000 gallons.
- (o) One (1) vertical above ground, fixed roof denatured ethanol storage tank, identified as Tank # 103, constructed in 2001, capacity: 20,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.2.1 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4] [40 CFR

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63, Subpart R] [326 IAC 20] [326 IAC 2-2]

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- (a) Any change or modification that increases the potential to emit VOC to more than 53.1 tons per year from the twelve (12) storage tanks, known as Tanks # 701 - 704, 711, 712, 714, 722, 732, and 100 - 103, may increase the potential to emit VOC from entire source to greater one hundred (100) tons per year and render the requirements of 326 IAC 2-7 applicable, and shall require prior IDEM, OAQ approval.
- (b) An change or modification which increases the potential to emit of any individual HAP to more than 7.60 tons per year or any combination of HAPs to more than 19.4 tons per year from Tanks # 701 - 704, 711, 712, 714, 722, 732, may increase the potential to emit of any single HAP from the entire source to greater than ten (10) tons per year and the potential to emit of any combination of HAPs from the entire source to greater than twenty-five (25) tons per year and render the requirements 326 IAC 2-7 as well as 40 CFR 63 Subpart R applicable, and shall require prior IDEM, OAQ, approval.

**Compliance Determination Requirements**

There are no specific Compliance Determination Requirements applicable to these emission units.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

There are no specific Compliance Monitoring Requirements applicable to these emission units.

**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

**D.2.2 Record Keeping Requirements**

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To document compliance with Conditions D.2.1, the Permittee shall maintain records for each tank of the following:

- (a) The amount of each fuel stored and the Material Safety Data Sheets (MSDSs) for each fuel.
- (b) The weight of VOCs, each individual HAP and total HAPs emitted for each compliance period.

**D.2.3 Record Keeping Requirements [326 IAC 8-4-3]**

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Pursuant to 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities), for the seven (7) internal floating roof, petroleum products storage tanks, identified as Tanks # 701, 702, 704, 711, 712, 714, and 722, the Permittee shall maintain records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed on the storage vessels. Such records shall be maintained for a period of two (2) years and shall be made to the commissioner upon written request.

**D.2.4 Record Keeping Requirements [40 CFR 52 Subpart P] [326 IAC 12-1]**

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Pursuant to 40 CFR 52 Subpart P and 326 IAC 12-1, the storage tanks identified as Tanks # 102 and 103 shall comply with the New Source Performance Standards (NSPS), 326 IAC 12 (40 CFR Part 60.116b only, Subpart Kb). 40 CFR Part 60.116b requires the Permittee to maintain accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tank.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: Buckeye Terminals, LLC - South Bend Terminal  
Source Address: 20630 West Ireland Road, South Bend, Indiana 46614  
Mailing Address: P.O. Box 368, Emmaus, Pennsylvania 18049  
FESOP No.: F 141-15854-00139

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Please check what document is being certified:

- ? Annual Compliance Certification Letter
- ? Test Result (specify) \_\_\_\_\_
- ? Report (specify) \_\_\_\_\_
- ? Notification (specify) \_\_\_\_\_
- ? Affidavit (specify) \_\_\_\_\_
- ? Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**COMPLIANCE BRANCH**  
**100 North Senate Avenue**  
**P.O. Box 6015**  
**Indianapolis, Indiana 46206-6015**  
**Phone: 317-233-5674**  
**Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)**  
**EMERGENCY OCCURRENCE REPORT**

Source Name: Buckeye Terminals, LLC - South Bend Terminal  
Source Address: 20630 West Ireland Road, South Bend, Indiana 46614  
Mailing Address: P.O. Box 368, Emmaus, Pennsylvania 18049  
FESOP No.: F 141-15854-00139

**This form consists of 2 pages**

**Page 1 of 2**

- ? This is an emergency as defined in 326 IAC 2-7-1(12)
- ? The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - ? The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM <sub>10</sub> , SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**FESOP Quarterly Report**

Source Name: Buckeye Terminals, LLC - South Bend Terminal  
Source Address: 20630 West Ireland Road, South Bend, Indiana 46614  
Mailing Address: P.O. Box 368, Emmaus, Pennsylvania 18049  
FESOP No.: F 141-15854-00139  
Facility: North and South Loading Racks  
Parameter: Petroleum products with true vapor pressure of 1.50 psia or greater and/or denatured ethanol throughput  
Limit: A total of 245,000,000 gallons of petroleum products with true vapor pressure of 1.50 psia or greater and/or denatured ethanol per twelve (12) consecutive month period with compliance determined at the end of each month, total at a VOC emission rate of 0.367 pounds per thousand (1000) gallons, equivalent to 45.0 tons of VOC per year, 1.99 tons of any individual HAP per year, any 4.97 tons of any combination of HAPs per year.

YEAR: \_\_\_\_\_

Month	Petroleum products (> or = 1.50 psia) and/or denatured ethanol (gallons)	Petroleum products (> or = 1.50 psia) and/or denatured ethanol (gallons)	Petroleum products (> or = 1.50 psia) and/or denatured ethanol (gallons)
	This Month	Previous 11 Months	12 Month Total

? No deviation occurred in this quarter.

? Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.  
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)**  
**QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Buckeye Terminals, LLC - South Bend Terminal  
Source Address: 20630 West Ireland Road, South Bend, Indiana 46614  
Mailing Address: P.O. Box 368, Emmaus, Pennsylvania 18049  
FESOP No.: F 141-15854-00139

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

? NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

? THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**



<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

? No deviation occurred in this quarter.

? Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for Federally Enforceable State Operating Permit (FESOP) Renewal

**Source Name:** Buckeye Terminals, LLC - South Bend Terminal  
**Source Location:** 20630 West Ireland Road, South Bend, Indiana 46614  
**County:** St. Joseph  
**FESOP:** F 141-15854-00139  
**SIC Code:** 5171  
**Permit Reviewer:** Michael S. Schaffer

On January 9, 2004, the Office of Air Quality (OAQ) had a notice published in the South Bend Tribune, South Bend, Indiana, stating that Buckeye Terminals, LLC - South Bend Terminal had applied for a Federally Enforceable State Operating Permit (FESOP) renewal to continue to operate a bulk gasoline terminal with a vapor collection system for VOC control. The notice also stated that OAQ proposed to issue a FESOP renewal for this operation and provided information on how the public could review the proposed FESOP renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP renewal should be issued as proposed.

On January 21, 2004, Jason L. Mengel of Buckeye Terminals, LLC, submitted comments on the proposed FESOP renewal. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

#### Comment 1:

Our comment pertains to Condition D.1.11 and we request that the existing paragraph be edited as follows:

"To document compliance with Conditions D.1.2 and D.1.3, during times when the Permittee is present, the Permittee shall perform daily checks of the key operating parameters for the vapor combustion unit (VCU), including pilot flame presence."

Parameters such as "temperatures" and "exit gas velocity" do not have impact on the VCU in regards to determining compliance with Conditions D.1.2 and D.1.3 and therefore, they should be deleted from daily performance checks. Temperatures and exit gas velocity will vary greatly depending on the product being loaded and the number of arms being loaded, and are not indicative of overall compliance of the VCU. The only key operating parameter that needs to be included in this requirements is the pilot flame presence.

#### Response 1:

Based on the above comment, IDEM, OAQ, has determined that the presence of a pilot flame in a vapor combustion unit (VCU) used to destroy VOC that is emitted from the loading of gasoline in combination with the testing requirements in Condition D.1.10, provides sufficient documentation to demonstrate compliance with Conditions D.1.2 and D.1.3. Therefore, Condition D.1.11 and the subsequent record keeping required in Condition D.1.13(f) has been revised as follows:

D.1.11 Vapor Combustion Unit Operation

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To document compliance with Conditions D.1.2 and D.1.3, during times when the Permittee is present, the Permittee shall perform daily checks of the ~~key operating parameters for the vapor combustion unit (VCU), including pilot flame presence, temperatures at VCU inlet, outlet and combustion zone, and exit gas velocity~~ **at the vapor combustion unit (VCU).**

D.1.13 Record Keeping Requirements [326 IAC 2-8-4] [326 IAC 8-4-9]

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- (f) To document compliance with Condition D.1.11, on days in which the Permittee is present, the Permittee shall maintain records of the **pilot flame presence** ~~daily check of key operating parameters~~ when the vapor combustion unit (VCU) is in use.

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

### Source Background and Description

<b>Source Name:</b>	<b>Buckeye Terminals, LLC - South Bend Terminal</b>
<b>Source Location:</b>	<b>20630 West Ireland Road, South Bend, Indiana 46614</b>
<b>County:</b>	<b>St. Joseph</b>
<b>SIC Code:</b>	<b>5171</b>
<b>Operation Permit No.:</b>	<b>F 141-15854-00139</b>
<b>Permit Reviewer:</b>	<b>Michael Schaffer</b>

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Buckeye Terminals, LLC - South Bend Terminal relating to the operation of a bulk gasoline terminal. Buckeye Terminals, LLC - South Bend Terminal was issued FESOP 141-9083-00139, on April 29, 1998.

### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) loading bay area, identified as A-1, consisting of one (1) loading rack with six (6) loading arms of which four (4) can operate at any one (1) time, identified as north, constructed in 1996, capacity: 630,720,000 gallons per year, total.

This loading bay area is equipped with the following:

- (1) Six (6) loading arms, identified as N<sub>1</sub> through N<sub>6</sub>, capacity: 600 gallons of petroleum products and/or denatured ethanol per minute each, and
- (2) One (1) vapor collection system for VOC control, vented to one (1) natural gas-fired vapor combustion unit, identified as VCU, rated 0.055 million British thermal units per hour.

- (b) One (1) loading bay area, identified as A-2, consisting of one (1) loading rack with six (6) loading arms of which four (4) can operate at any one (1) time, identified as south, constructed in 1996, capacity: 630,720,000 gallons per year, total.

This loading bay area is equipped with the following:

- (1) Six (6) loading arms, identified as S<sub>1</sub> through S<sub>6</sub>, capacity: 600 gallons of petroleum products and/or denatured ethanol per minute each, and
- (2) One (1) vapor collection system for VOC control, vented to one (1) natural gas-fired vapor combustion unit, identified as VCU, rated 0.055 million British thermal units per hour.

- (c) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified

as Tank # 701, constructed in 1947, capacity: 840,000 gallons.

- (d) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 702, constructed in 1947, capacity: 729,246 gallons.
- (e) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 704, constructed in 1946, capacity: 420,000 gallons.
- (f) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 711, constructed in 1947, capacity: 798,000 gallons.
- (g) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 712, constructed in 1946, capacity: 420,000 gallons.
- (h) One (1) vertical above ground, internal floating roof petroleum products storage tank, identified as Tank # 714, constructed in 1946, capacity: 420,000 gallons.
- (i) One (1) vertical above ground, internal floating roof, petroleum products storage tank, identified as Tank # 722, constructed in 1951, capacity: 2,299,962 gallons.
- (j) One (1) vertical above ground, fixed roof distillate (any petroleum product with a vapor pressure less than 1.5 psia) storage tank, identified as Tank # 732, constructed in 1951, capacity: 2,299,962 gallons.
- (k) One (1) vertical above ground, fixed roof distillate (any petroleum product with a vapor pressure less than 1.5 psia) storage tank, identified as Tank # 703, constructed in 1947, capacity: 420,000 gallons.
- (l) One (1) horizontal above ground, fixed roof, fuel additive storage tank, identified as Tank # 100, constructed in 1996, capacity: 8,000 gallons.
- (m) One (1) horizontal above ground, fixed roof, fuel additive storage tank, identified as Tank # 101, constructed in 1996, capacity: 8,000 gallons.
- (n) One (1) vertical above ground, fixed roof denatured ethanol storage tank, identified as Tank # 102, constructed in 1996, capacity: 20,000 gallons.
- (o) One (1) vertical above ground, fixed roof denatured ethanol storage tank, identified as Tank # 103, constructed in 2001, capacity: 20,000 gallons.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### **New Emission Units and Pollution Control Equipment Receiving New Source Review Approval**

There are no new facilities proposed at this source during this review process.

#### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) natural gas-fired space heaters, heat input capacity: 0.080 million British thermal units per hour, each.
- (b) Process piping, containing pumps, flanges, valves, and other processes.
- (c) One (1) oil/water separator, capacity: 3,000 gallons.

### Existing Approvals

The source has been operating under the following previous approvals including:

- (a) FESOP 141-9083-00139, issued on April 29, 1998,
- (b) First Administrative Amendment AAF 141-12160-00139, issued on May 24, 2000, and
- (c) Second Administrative Amendment AAF 141 14775-00139, issued on September 5, 2001.

All terms and conditions from previous approvals issued pursuant to the permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous approvals are superseded upon issuance of this permit.

The following terms and conditions from previous approvals have been revised in this permit:

FESOP 141-9083-00139, issued on April 29, 1998;

- (a) Condition D.1.4: The petroleum products from the tanks and loading racks shall be limited to 420,059,520 gallons per year, rolled on a monthly basis. This production limit is equivalent to volatile organic compounds (VOC) emissions of 99 tons per year, rolled on a monthly basis. Therefore, 326 IAC 2-7 (Part 70 Program) will not apply.

Reason not incorporated: Since this source has distinguished the differences in potential to emit VOC between the loading rack arms and the storage tanks, the VOC limitations to render the requirements of 326 IAC 2-7 not applicable have been revised.

In order to render the requirements of 326 IAC 2-7 not applicable, as part of this renewal, the source has elected to limits the loading rack as follows:

- (1) The throughput of any petroleum product with a true vapor pressure of 1.50 psia or greater and/or denatured ethanol at north and south loading areas, will be limited to a total of 245,000,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month at an emission rate of 0.367 pounds per thousand (1,000) gallons of throughput, equivalent to 45.0 tons of VOC per year.
- (2) The throughput and emission factor limits are also equivalent to a potential to emit of 1.99 tons per year of any single HAP and 4.97 tons per year of any combination of HAPs from the north and south loading racks.

The throughput limit in combination with the emission factor limit will ensure that the potential to emit VOC from the entire source is less than one hundred (100) tons per year, the potential to emit any single HAP from the entire source is less than ten (10) per year, and the potential to emit any combination of HAPs is less than twenty-five (25) tons per year, and renders the

requirements of 326 IAC 2-7 not applicable.

- (b) Conditions D.1.4(a) and D.2.8(a) - The portion of the condition that says: "When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1,400°F to maintain a minimum 35 milligram per liter of total organic compounds (TOC) captured."

Reason not incorporated: The operation of the thermal oxidizer (now called VCU) more closely represents the operation of a flare vapor combustion unit for which there is no minimum operating temperature required. That monitoring requirement will be revised to state that the Permittee shall perform daily checks of the key operating parameters, including flame presence, temperatures at the VCU inlet, outlet and combustion zone, and exit gas velocity.

- (c) All construction conditions from Section D.2.

Reason not incorporated: All facilities previously permitted have already been constructed. Therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

#### Enforcement Issue

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on July 12, 2002. Additional information was received on August 18, 2003.

#### Emission Calculations

See Pages 1 through 4 of 4 in Appendix A of this document for detailed emissions calculations.

#### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/year)
PM	0.002
PM <sub>10</sub>	0.007
SO <sub>2</sub>	0.001
VOC	6,465



<b>Pollutant</b>	<b>Unrestricted Potential Emissions (tons/year)</b>
CO	52.7
NO <sub>x</sub>	21.1

Note: For the purpose of determining Title V applicability for particulates, PM<sub>10</sub>, not PM, is the regulated pollutant in consideration.

<b>HAPs</b>	<b>Unrestricted Potential Emissions (tons/year)</b>
2,2,4 Trimethylpentane	62.0
Benzene	40.8
Biphenyl	0.042
Cresole	102
Cumene	1.02
Ethyl benzene	4.12
n-Hexane	288
MTBE	146
Naphthalene	0.036
Phenol	0.007
Styrene	5.74
Toluene	54.8
Xylene	15.4
<b>TOTAL</b>	<b>720</b>

- (a) The unrestricted potential emissions of VOC are equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The unrestricted potential emissions of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Buckeye Terminals, LLC - South Bend Terminal  
South Bend, Indiana  
Permit Reviewer:MES

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F 141-15854-00139

### Potential to Emit After Issuance

The source, issued a FESOP on April 28, 1998, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	<b>Potential to Emit After Issuance</b> (tons/year)						
Process/emission unit	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Storage Tanks	-	-	-	42.0	-	-	Single 2.04 Total 5.01
North and South Loading Racks when using Petroleum Products With Vapor Pressure < 1.50 psia and/or Denatured Ethanol	-	-	-	45.0	-	-	Single 1.99 Total 4.97
North and South Loading Racks When using Remaining Capacity as Distillates (Petroleum Products With Vapor Pressure < 1.50 psia)	-	-	-	1.61	-	-	Single 0.369 Total 0.578
Combustion from VCU and Insignificant Space heaters	0.002	0.007	0.001	0.005	52.8	21.2	Negligible
Pumps, Valves, Flanges, and Other	-	-	-	0.218	-	-	Negligible
Insignificant Oil/Water Separater	-	-	-	0.050	-	-	Negligible
Total PTE After Issuance	0.002	0.007	0.001	88.9	52.8	21.2	Single less than 10 Total less than 25

Potential emissions after issuance at this source are based on a total limited throughput of 245,000,000 gallons of throughput of any petroleum product with a true vapor pressure of 1.50 psia or greater and/or denatured ethanol per twelve (12) consecutive month period and a VOC emission factor limit of 0.367 pounds per thousand (1000) gallons through north and south loading rack areas, after control by the vapor combustion unit (VCU) and the vapor collection system.

Note that the limited potential to emit in the above table is based on a total loading rack throughput of 1,261,440,000 gallons of liquid products per year. The preceding throughput limit has been included as part of that total throughput.

### County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM <sub>10</sub>	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Maintenance
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as attainment or unclassifiable for ozone.
- (b) St. Joseph County has been classified as attainment, maintenance attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### Federal Rule Applicability

- (a) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60, Subpart K), because Tanks # 701 through 704, 712, 714, 722, 732, and 100 through 103 were all constructed before June 11, 1973, or after May 19, 1978.
- (b) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60, Subpart Ka), because Tanks # 701 through 704, 712, 714, 722, 732, and 100 through 103 were all constructed before May 18, 1978, or after June 23, 1984.
- (c) On October 15, 2003, revisions to 40 CFR 60, Subpart Kb, became effective. As of the date this permit is being issued these revisions have not been incorporated into the Indiana state rules. Therefore, the requirements from the previous version of 40 CFR 60, Subpart Kb, published in the federal register on August 8, 1987, which is referenced by 326 IAC 12, will remain applicable until the revisions are incorporated into the Indiana State Implementation Plan (SIP) and the condition is modified in a subsequent permit action.
  - (1) Tanks # 701 through 704, 712, 714, 722, and 732 were all constructed before July 23, 1984. Therefore, Tanks # 701 through 704, 712, 714, 722, and 732 will still not be subject to the New Source Performance Standard, 326 IAC 12 (40 CFR Part 60, Subpart Kb) after the rule revision.

- (2) Tanks # 100 and 101 will still not be subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60, Subpart Kb) after the rule revision because the tanks, constructed after July 23, 1984, have storage capacities less than 40 cubic meters each.
- (3) Pursuant to 40 CFR 52 Subpart P and 326 IAC 12, Tanks # 102 and 103, all constructed after July 23, 1984, is subject to NSPS, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) because each tank has a capacity greater than forty (40) cubic meters. However, the vapor pressure is less than 15.0 kiloPascals, and the asphalt storage tank is subject to only 40 CFR Part 60.116b, paragraphs (a) and (b), which require record keeping. Pursuant to 40 CFR 60.110b, the requirements of 40 CFR 60, Subpart Kb, will not be applicable after the state rule revision because the tanks have storage capacities less than seventy-five (75) cubic meters each.
- (d) The north and south loading rack areas are subject to the New Source Performance Standards (326 IAC 12) (40 CFR 60.500 through 60.506, Subpart XX, Standards of Performance for Bulk Gasoline Terminals) because the north and south loading racks were constructed after the rule applicability date of December 17, 1980. The operation of the VCU satisfies the emission requirements of this subpart, specifically that the VOC emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks will not exceed thirty-five (35) milligrams of total organic compounds per liter of gasoline loaded.

The total VOC emissions from the submerged gasoline loading rack with vapor balance service are shown on page 2 of 4 of Appendix A based on a submerged loading rack emission factor of 10.5 pounds of VOC per kilogallon of gasoline loaded with a 99.27% vapor control system control efficiency. Note that the 99.27% control efficiency was multiplied by the 97.17% capture efficiency to obtain the overall reduction efficiency (eff) term used to calculate the throughput limit.

$10.25 \text{ pounds} = 10.25 \times 453.59 \text{ grams per pound} \times 1,000 \text{ milligrams per gram} = 4,649,297.5 \text{ milligrams}$

$1 \text{ kilogallon} = 1,000 \text{ gallons} \times 3.7853 \text{ liters per gallon} = 3,785.3 \text{ liters}$

Therefore, 10.25 pounds per kilogallon is equivalent to 4,649,297.5 milligrams per 3,785.3 liters or 1,228.25 milligrams per liter. With a 99.27% control efficiency, the controlled VOC emission rate from the submerged gasoline loading rack will be  $1,228.25 \text{ milligrams per liter} \times (1 - 0.9927) = 8.96 \text{ milligrams per liter}$ . This emission rate complies with the NSPS Subpart XX standard of less than thirty-five (35) milligrams per liter.

- (e) The equipment at this source does not contain or contact a fluid that is at least ten percent (10%) benzene by weight. Therefore, pursuant to 40 CFR 61.111, this source is not in benzene service and is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 61, Subpart J.
- (f) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 61, Subpart V, because this source is not considered to be in volatile hazardous air pollutant (VHAP) service, as defined by 40 CFR 61.241.

- (g) This source is not subject to Gasoline Distribution NESHAP 40 CFR Part 63, Subpart R, Gasoline Distribution because this source will operate as a FESOP source pursuant 326 IAC 2-8-4, which limits the potential to emit of the entire source to less than ten (10) tons per year of any single HAP and twenty-five (25) tons per year of any combination of HAPs.

#### **State Rule Applicability - Entire Source**

##### **326 IAC 2-2 (Prevention of Significant Deterioration (PSD))**

- (a) Tanks # 701 - 704, 711, 712, 714, 722, and 732 were all constructed prior to August 7, 1977. Therefore, a PSD permit pursuant 326 IAC 2-2, was not required for this minor source.
- (b) The potential to emit VOC from Tanks # 100 - 102 and the north and south loading areas, constructed in 1996, was less than two hundred fifty (250) tons per year after controls. Therefore, the construction of those emission units was considered a minor modification to an existing minor PSD source.
- (c) This source is a minor PSD source because pursuant to 326 IAC 2-8-4 (FESOP), the potential to emit VOC shall be limited to less than one hundred (100) tons per year for the entire source.

Note that this source is not operating as one of the 28 listed major PSD source categories because the storage capacity of the entire source is less than 300,000 barrels (12,600,000 gallons).

##### **326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit of more than ten (10) tons per year of VOC in St. Joseph County. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. The statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6 and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8).

##### **326 IAC 2-4.1-1 (New source toxics control)**

The entire source except for Tank 103 was constructed before July 27, 1997. The potential to emit any single HAP from Tank 103 is less than ten (10) tons per year and the potential to emit any combination of HAPs from Tank 103 is less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply.

##### **326 IAC 2-8-4 (FESOP)**

Pursuant to this rule, the amount of PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> shall be limited to less than one hundred (100) tons per year. In addition, the amount of a single HAP shall be limited to less than ten (10) tons per year and the combination of all HAPs shall be limited to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-7, do not apply. The following limitation shall apply to the north and south loading racks:

The total throughput of any petroleum product with a true vapor pressure of 1.50 psia or greater and/or denatured ethanol to the north and south loading rack areas will be limited to 245,000,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month at an

emission rate of 0.367 pounds per thousand (1000) gallons, equivalent to 45.0 tons of VOC per year. This throughput limit in combination with 1.61 tons per year potential from loading rack using the remaining throughput available as distillate distillates (any petroleum product with a vapor pressure less than 1.5 psia), the 42.0 tons per year potential VOC emissions from the storage tanks and the 0.218 tons per year potential VOC emissions from fugitive emissions, limits the potential to emit VOC from entire source to less than one hundred (100) tons per year. This throughput also limits the potential to emit of each individual HAP to 1.99 tons per year, total HAPs to 4.97 tons per year from the north and south loading racks and less than ten (10) tons per year for each individual HAP and twenty-five (25) tons per year of the combination of HAPs from the entire source. The vapor combustion unit (VCU) and the vapor collection system shall be in operation at all times in order to comply with this limitation.

### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

#### 326 IAC 8-4-3 (Petroleum liquid storage facilities)

- (a) Tanks # 703 and 732 as well as Tanks # 100 through 103 are not subject to the requirements of 326 IAC 8-4-3 because the tanks only store petroleum products with true vapor pressures less than 10.5 kPa (1.52 psi) and/or have storage capacities of less than 39,000 gallons.
- (b) Tanks # 701, 702, 704, 711, 712, 714, and 722 are subject to the requirements of 326 IAC 8-4-3 because each tank has a capacity greater than 39,000 gallons and has a true vapor pressure greater than 10.5 kPa (1.52 psi). Tanks # 701, 702, 704, 711, 712, 714, and 722 are all internal floating roof tanks in St. Joseph County. The following is required for Tanks # 701, 702, 704, 711, 712, 714, and 722:

The Permittee shall maintain records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed on the storage vessels. Such records shall be maintained for a period of two (2) years and shall be made available to the commissioner upon written request.

#### 326 IAC 8-4-4 (Bulk Gasoline Terminals)

This source is subject to the requirements of 326 IAC 8-4-4 because the source is a bulk gasoline terminal in St. Joseph County. Pursuant to 326 IAC 8-4-4, the source must comply with the following requirements:

- (a) No Permittee of a bulk gasoline terminal shall permit the loading of gasoline into any transport,

excluding railroad tank cars, or barges, unless:

- (1) The bulk gasoline terminal is equipped with a vapor control system, in good working order, in operation and consisting of one of the following:
    - (A) An adsorber or condensation system which processes and recovers vapors and gases from the equipment being controlled, releasing no more than 80 milligrams per liter of VOC to the atmosphere.
    - (B) A vapor collection system which directs all vapors to a fuel gas system or incinerator.
    - (C) An approved control system, demonstrated to have control efficiency equivalent to or greater than clause (A) above.
  - (2) Displaced vapors and gases are vented only to the vapor control system.
  - (3) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.
  - (4) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which will be closed upon disconnection.
- (b) If employees of the owner of the bulk gasoline terminal are not present during loading, it shall be the responsibility of the owner of the transport to make certain the vapor control system is attached to the transport. The owner of the terminal shall take all reasonable steps to insure that owners of transports loading at the terminal during unsupervised times comply with this section.

The source will comply with this rule by operating the flare and the vapor control system for the north and south loading rack areas, at all times when the loading rack areas are in operation. The vapor combustion unit (VCU) and vapor control system limit VOC emissions to the atmosphere to no more than 80 milligrams per liter.

#### 326 IAC 8-4-5 (Petroleum Sources; Bulk Gasoline Plants)

This source is not a bulk gasoline plant as defined by 326 IAC 1-2-7. Therefore, this source is not subject to the requirements of 326 IAC 8-4-5, Petroleum Sources; Bulk Gasoline Plants.

#### 326 IAC 8-4-7 (Petroleum Sources; Gasoline Transports)

The source is subject to 326 IAC 8-4-7, because it is a bulk gasoline terminal in St. Joseph County. The requirements of this rule are as follows:

- (a) No owner or operator of a gasoline transport shall cause, allow, or permit the transfer of gasoline between transports and storage tanks that are equipped with a vapor balance system or vapor recovery system unless:
  - (1) the vapor balance system or vapor recovery system is connected and operating according to manufacturers' specifications;



- (2) gasoline transport compartment hatches are closed at all times during loading operations;
  - (3) except as provided in 326 IAC 8-4-9(i), there are no visible leaks, or otherwise detectable leaks (measured at twenty-one thousand (21,000) parts per million as propane as specified in 40 CFR 63.425(f)(1)), in the gasoline transport's pressure/vacuum relief valves, hatch cover, trailer compartments, storage tanks, or associated vapor and liquid lines during loading or unloading; and
  - (4) the pressure relief valves on gasoline transports are set to release at no less than four and eight-tenths (4.8) kilo Pascals (seven-tenths (0.7) pounds per square inch).
- (b) Tank wagons are exempt from vapor balance requirements.
  - (c) When employees of the owner of a bulk gasoline terminal are present to supervise or perform loading, the owner of the terminal shall be responsible for compliance with subsection (a)(1) through (a)(3). The owner of the terminal shall also ensure that owners of gasoline transports loading at the terminal during unsupervised times comply with this section.
  - (d) Gasoline transports must be designed, maintained, and operated so as to be vapor-tight.
  - (e) Transfer of gasoline between a gasoline transport and a storage tank that is not equipped with a vapor balance system or vapor recovery system is not subject to this section.

326 IAC 8-4-9 (Petroleum Sources; Leaks from Transports and Vapor Collection Systems; Records)

The vapor balance and vapor control system is subject to the requirements of 326 IAC 8-4-9 because the source is subject to 326 IAC 8-4-4 and the gasoline transports at this source are subject to 326 IAC 8-4-7. The requirements are as follows:

- (a) No person shall allow a gasoline transport that is subject to this rule and that has a capacity of two thousand (2,000) gallons or more to be filled or emptied unless the gasoline transport completes the following:
  - (1) Annual leak detection testing before the end of the twelfth calendar month following the previous year's test, according to test procedures contained in 40 CFR 63.425 (e), as follows:
    - (A) Conduct the pressure and vacuum tests for the transport's cargo tank using a time period of five (5) minutes. The initial pressure for the pressure test shall be four hundred sixty (460) millimeters H<sub>2</sub>O (eighteen (18) inches H<sub>2</sub>O) gauge. The initial vacuum for the vacuum test shall be one hundred fifty (150) millimeters H<sub>2</sub>O (six (6) inches H<sub>2</sub>O) gauge. The maximum allowable pressure or vacuum change is twenty-five (25) millimeters H<sub>2</sub>O (one (1) inch H<sub>2</sub>O) in five (5) minutes.
    - (B) Conduct the pressure test of the cargo tank's internal vapor valve as follows:
      - (i) After completing the test under (A), use the procedures in 40 CFR 60, Appendix A, Method 27 to repressurize the tank to four hundred sixty (460) millimeters H<sub>2</sub>O (eighteen (18) inches H<sub>2</sub>O) gauge. Close

the transport's internal vapor valve or valves, thereby isolating the vapor return line and manifold from the tank.

- (ii) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five (5) minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five (5) minute pressure increase is one hundred thirty (130) millimeters H<sub>2</sub>O (five (5) inches H<sub>2</sub>O).
- (2) Repairs by the gasoline transport owner or operator, if the transport does not meet the criteria of subdivision (1), and retesting to prove compliance with the criteria of subdivision (1).
- (b) The annual test data remain valid until the end of the twelfth calendar month following the test. The owner of the gasoline transport shall be responsible for compliance with subsection (b) and shall provide the owner of the loading facility with the most recent valid modified 40 CFR 60, Appendix A, Method 27 test results upon request. The owner of the loading facility shall take all reasonable steps, including reviewing the test date and tester's signature, to ensure that gasoline transports loading at its facility comply with subsection (b).
- (c) The Permittee shall:
  - (1) design and operate the applicable system and the gasoline loading equipment in a manner that prevents:
    - (A) gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen (18) inches of H<sub>2</sub>O) and a vacuum from exceeding one thousand five hundred (1,500) pascals (six (6) inches of H<sub>2</sub>O) in the gasoline transport;
    - (B) a reading equal to or greater than twenty-one thousand (21,000) parts per million as propane, from all points on the perimeter of a potential leak source when measured by the method referenced in 40 CFR 60, Appendix A, Method 21, or an equivalent procedure approved by the commissioner during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and
    - (C) avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and
  - (2) within fifteen (15) days, repair and retest a vapor balance, collection, or control system that exceeds the limits in subdivision (1).
- (d) The department may, at any time, monitor a gasoline transport, vapor balance, or vapor control system to confirm continuing compliance with subsection (a).
- (e) The Permittee shall maintain records of all certification testing. The records shall identify the following:
  - (1) The vapor balance, vapor collection, or vapor control system.
  - (2) The date of the test and, if applicable, retest.

- (3) The results of the test and, if applicable, retest.

The records shall be maintained in a legible, readily available condition for at least two (2) years after the date the testing and, if applicable, retesting were completed.

- (f) The owner or operator of a gasoline transport subject to this section shall keep a legible copy of the transport's most recent valid annual modified 40 CFR 60, Appendix A, Method 27 test either in the cab of the transport or affixed to the transport trailer. The test record shall identify the following:

- (1) The gasoline transport.
- (2) The type and date of the test and, if applicable, date of retest.
- (3) The test methods, test data, and results certified as true, accurate, and in compliance with this rule by the person who performs the test.

This copy shall be made available immediately upon request to the department and to the owner of the loading facility for inspection and review. The department shall be allowed to make copies of the test results.

- (g) If the commissioner allows alternative test procedures such method shall be submitted to the U.S. EPA as a SIP revision.
- (h) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in subsection (d)(1)(B). Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

#### 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This source located in St. Joseph County is not subject to 326 IAC 8-9 because the source is not located in Clark, Floyd, Lake or Porter County.

#### 326 IAC 12-1 (New Source Performance Standards)

- (a) Pursuant to 326 IAC 12, the north and south loading rack areas are required to comply with the requirements of 40 CFR 60.500 through 60.506, Subpart XX, Standards of Performance for Bulk Gasoline Terminals, as described in the "Federal Rule Applicability" section of this TSD.
- (b) Pursuant to 40 CFR 52 Subpart P and 326 IAC 12, Tanks # 102 and 103 are required to comply with the requirements of the previous version of 40 CFR Part 60.116b, paragraphs (a) and (b), published in the federal register on April 8, 1987, which require recordkeeping, as described in the "Federal Rule Applicability" section of this TSD.

#### 326 IAC 14-7 (Emission Standards for Equipment Leaks (Fugitive Emission Sources) of Benzene)

The source is not subject to 326 IAC 14-7 because the amount of benzene emitted is less than ten percent (10%) of the total HAPs and therefore, not classified as a benzene service defined in 40 CFR 60, Subpart J.

### 326 IAC 14-8 (Emission Standard for Equipment Leaks (Fugitive Emission Sources))

The source is not subject to 326 IAC 14-8 because the amount of VHAP in petroleum products are less than ten percent (10%) of the total molecular weight of a liquid or a gas that passes through a flare, valve, or range and therefore, is not classified as a VHAP service defined in 40 CFR 60, Subpart V.

### Testing Requirements

The following testing requirements apply to the north and south loading rack areas:

- (a) To demonstrate compliance with 326 IAC 2-8-4, a compliance stack test shall be performed by July 11, 2007 which corresponds to five (5) years since the latest valid stack test at the north and south loading rack areas. This test shall be performed on the vapor combustion system (VCU) with the vapor collection systems according to 40 CFR 60, Appendix A, Methods 25 and 25A.
- (b) To demonstrate compliance with 326 IAC 8-4-9, the Permittee shall perform testing required in 326 IAC 8-4-9.
- (c) If the commissioner allows alternative test procedures in (c)(1)(B) of 326 IAC 8-4-9, such method shall be submitted to the U.S. EPA as a SIP revision.
- (d) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in (c)(1)(B) of 326 IAC 8-4-9. Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

### Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The vapor combustion unit has applicable compliance monitoring conditions as specified below:

- (a) When the Permittee is present, the Permittee shall perform daily checks of the key operating parameters, including pilot flame presence, temperatures at VCU inlet, outlet and combustion zone, and exit gas velocity.
- (b) The Permittee shall prepare and maintain an Operation and Maintenance Plan for the vapor combustion unit (VCU). This plan shall insure that the VCU is operated and maintained properly in accordance with manufacturer's specifications and good air pollution control practices for minimizing emissions. The Operation and Maintenance Plan shall be kept onsite at all times.

Note that this compliance monitoring requirement is being required to account for instances when the source is being operated as an "unmanned" source.

- (c) Quarterly reports shall be submitted to OAQ. These reports shall include the petroleum products and denatured ethanol throughput to the truck loading rack.

These monitoring conditions are necessary because the vapor combustion unit (VCU) must operate properly to ensure compliance with 326 IAC 2-8 (FESOP).

All compliance requirements from previous approvals were incorporated into this FESOP except the following:

When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1,400°F to maintain a minimum 35 milligram per liter of total organic compounds (TOC) captured.

Reason not incorporated: The operation of the thermal oxidizer (now called VCU) more closely represents the operation of a flare vapor combustion unit for which there is no minimum operating temperature required.

## **Conclusion**

The operation of this bulk gasoline terminal shall be subject to the conditions of the attached proposed FESOP Renewal No.: F 141-15854-00139.

**Appendix A: Emissions Calculations  
VOC and HAP Emissions  
From Storage Tanks**

Page 1 of 4 TSD App A

**Company Name:** Buckeye Terminals, LLC - South Bend Terminal  
**Address City IN Zip:** 20630 West Ireland Road, South Bend, Indiana 46614  
**FESOP:** 141-15854  
**Plt ID:** 141-00139  
**Reviewer:** Michael S. Schaffer  
**Application Date:** July 12, 2002

**Tank Capacity**

Tank#	capacity (gallons)	capacity (barrels)
701	840000	20000
702	729246	17363
704	420000	10000
711	798000	19000
712	420000	10000
714	420000	10000
722	2299962	54762
703	420000	10000
732	2299962	54762
100	8000	190
101	8000	190
102	20000	476
103	20000	476
<b>Total:</b>	<b>8703170</b>	<b>207222</b>

**VOC Emissions**

Tank#	Potential to Emit VOC From Tanks (lbs/year)	Roof Landing VOC Emissions (tons/year)	Potential to Emit VOC (tons/year)
701	3877	3.60	5.54
702	4263	3.17	5.30
704	3146	1.62	3.19
711	5035	3.17	5.69
712	3146	1.62	3.19
714	3146	1.62	3.19
722	7144	8.81	12.4
703	338	0.00	0.169
732	1861	0.00	0.931
100	500	0.00	0.250
101	500	0.00	0.250
102	1866	0.00	0.933
103	1866	0.00	0.933
<b>Total:</b>	<b>36688</b>	<b>23.6</b>	<b>42.0</b>

Capacity (barrels) = Capacity (gallons) \* (0.02381 barrels/gallon)

Roof Landing Emissions are based on American Petroleum Institute's "Determining Product Evaporation Losses From Tank Turnovers" Final Draft Report (1997) and based on 24 roof landings per year at internal floating roof tanks only (Tanks # 701, 702, 704, 711, 712, 714, and 722).

Note: Worst case product stored in Tanks # 701 & 702, 704, 711 & 712, and 722 is Gasoline RVP 13, Tanks # 703 & 732 is Jet Kerosene, Tanks # 100 & 101 is fuel additive, and Tanks # 102 & 103 is denatured ethanol

**State Potential Emissions**

METHODOLOGY FOR TANKS: Tanks 4.0  
METHODOLOGY FOR LOADING RACK: See page 2

**Gasoline HAP Emissions**

HAP	Worst Case Weight % in gasoline vapor	Potential to Emit VOC from Gasoline (tanks only) (lbs/yr)	HAP Emissions from Gasoline (lbs/yr)	Worst Case HAP Emissions (tanks only) (tons/yr)
2,2,4- Trimethylpent.	0.953%	76977	734	0.367
Benzene	0.625%	76977	481.4	0.241
Biphenyl	0.001%	76977	0.500	0.0003
Cresole	1.565%	76977	1204.7	0.602
Cumene	0.016%	76977	12.047	0.006
Ethyl benzene	0.063%	76977	48.60	0.024
n-Hexane	4.428%	76977	3408	1.704
MTBE	2.240%	76977	1724	0.862
Napthalene	0.0006%	76977	0.423	0.00021
Phenol	0.0001%	76977	0.085	0.00004
Styrene	0.0882%	76977	67.9	0.034
Toluene	0.842%	76977	648.25	0.324
Xylene	0.235%	76977	180.9	0.090
<b>Subtotal HAPs:</b>				<b>4.256</b>

**Denatured Ethanol HAP Emissions**

HAP	Worst Case Weight % in denatured ethanol vapor	Potential to Emit VOC from denatured ethanol (tanks only) (lbs/yr)	HAP Emissions from denatured ethanol (lbs/yr)	Worst Case HAP Emissions (tanks only) (tons/yr)
2,2,4- Trimethylpent.	0.953%	3732	35.57	0.018
Benzene	0.625%	3732	23.34	0.012
Biphenyl	0.001%	3732	0.024	0.00001
Cresole	1.565%	3732	58.41	0.029
Cumene	0.016%	3732	0.584	0.0003
Ethyl benzene	0.063%	3732	2.36	0.001
n-Hexane	4.428%	3732	165.24	0.083
MTBE	2.240%	3732	83.60	0.042
Napthalene	0.0006%	3732	0.021	0.00001
Phenol	0.0001%	3732	0.004	0.000002
Styrene	0.0882%	3732	3.29	0.002
Toluene	0.842%	3732	31.43	0.016
Xylene	0.235%	3732	8.77	0.004
<b>Subtotal HAPs:</b>				<b>0.206</b>

**Jet Kerosene HAP Emissions**

HAP	Worst Case Weight % in Jet Kerosene vapor	Potential to Emit VOC from Jet Kerosene (tanks only) (lbs/yr)	HAP Emissions from Jet Kerosene (lbs/yr)	Worst Case HAP Emissions (tanks only) (tons/yr)
2,2,4- Trimethylpent.	0.327%	2199	7.190	0.004
Benzene	2.149%	2199	47.26	0.024
Biphenyl	0.001%	2199	0.019	0.00001
Cresole	0.381%	2199	8.4	0.004
Cumene	0.194%	2199	4.265	0.0021
Ethyl benzene	0.892%	2199	19.61	0.010
n-Hexane	22.822%	2199	501.862	0.2509
Napthalene	0.080%	2199	1.750	0.0009
Phenol	0.0139%	2199	0.305	0.00015
Toluene	6.003%	2199	132.0	0.066
Xylene	2.910%	2199	64.00	0.032
<b>Subtotal HAPs:</b>				<b>0.393</b>
<b>Total HAPs from Tanks (tons/yr):</b>				<b>5.01</b>

**Fuel Additive HAP Emissions**

HAP	Worst Case Weight % in Fuel Additive vapor	Potential to Emit VOC from Fuel Additive (tanks only) (lbs/yr)	HAP Emissions from Fuel Additive (lbs/yr)	Worst Case HAP Emissions (tanks only) (tons/yr)
Benzene	20.0%	1000	200.00	0.100
Xylene	10.0%	1000	100.00	0.050
<b>Subtotal HAPs:</b>				<b>0.150</b>

**Methodology**

HAP % \* VOC Emissions (lbs/yr) = HAPs Emissions (lbs/yr) / (2000lbs/ton) = HAPs Emission (tons/yr)

**Appendix A: Emission Calculations**  
**VOC and HAP Emissions**  
**Piping Fugitives and Loading Rack**

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**Company Name: Buckeye Terminals, LLC - South Bend Terminal**  
**Address City IN Zip: 20630 West Ireland Road, South Bend, Indiana 46614**  
**FESOP: 141-15854**  
**Pit ID: 141-00139**  
**Reviewer: Michael S. Schaffer**  
**Application Date: July 12, 2002**

**North And South Loading Racks "Worst Case" VOC Emissions**

Fugitive Source	Gasoline Emission Factor (lbs/1000gal)	Annual Throughput (gallons)	VOC Emissions (lbs/yr)	VOC Emissions (tons/yr)		Uncontrolled VOC Emissions (tons/yr)	Overall Reduction Efficiency	Controlled VOC Emissions (tons/yr)
Loading Rack	10.25	1261440000	12929760	6465		<b>6465</b>	<b>96.42%</b>	<b>231.4</b>

Note that "Worst Case" VOC emissions are based on 8 arms loading gasoline at one time loading at a maximum of 4,380 hours per year

**North And South Loading Rack Areas "Worst Case" Limited VOC Emissions**

Fugitive Source	Gasoline Emission Factor (lbs/1000gal)	Limited Annual Throughput (gallons)	VOC Emissions (lbs/yr)	VOC Emissions (tons/yr)		Limited Uncontrolled VOC Emissions (tons/yr)	Overall Reduction Efficiency	Limited Controlled VOC Emissions (tons/yr)
Loading Rack	10.25	245000000	2511250	1256		<b>1256</b>	<b>96.42%</b>	<b>45.0</b>

Fugitive Source	Jet Kerosene Emission Factor (lbs/1000gal)	Annual Throughput (gallons)	VOC Emissions (lbs/yr)	VOC Emissions (tons/yr)		Uncontrolled VOC Emissions (tons/yr)	Overall Control Efficiency	Controlled VOC Emissions (tons/yr)
Loading Rack	0.016	1016440000	16148	8.07		<b>8.07</b>	<b>80.00%</b>	<b>1.61</b>

**Methodology**

Emission Factor is based on the equation  $L = 12.46 \text{ SPM} / T$  from (AP-42 page 5.2-4)

L=Loading Loss, S = a saturation factor which is based on a dedicated vapor balance service of gasoline loading and a dedicated normal service of Jet Kerosene from a submerged fillpipe, P=True Vapor Pressure, T = Temperature of Bulk liquid loaded

"Worst Case" product is gasoline and Jet kerosene based on Gasoline RVP 13 and Jet Kerosene @ 60 degrees F (AP-42 table 7.1-2)

Overall Reduction Efficiency = eff = capture efficiency percentage x vapor collection system control efficiency = 97.17% x 99.27%

(Emission Factor (lbs/1000gal) \* Total Limited Annual or Annual Throughput (gallons)) / 1000 gallons = Emissions (lbs/yr) / 2000 (lbs/ton) = Emissions (tons/yr)

Total Maximum Annual Throughput (gallons/yr) = 8 loading arms \* 600 gallons/min \* 60 min/hr \* 4380 loading hours per year = 1,261,440,000 gallons per year

Note that emissions from gasoline also includes denatured ethanol and any petroled product with a true vapor pressure of 1.50 psia or greater .

Since gasoline, denatured ethanol, and any petroleum product with a true vapor pressure of 1.50 psia or greater are limited, the source can still load the remaining throughput with jet kerosene or any other distillate (petroleum product with a true vapor pressuer of less than 1.50 psia).

**Potential HAP Emissions After Limitations**

HAP	Worst Case Weight % in Gasoline Vapor	Amount of "Worst Case" VOC Emissions From Gasoline (lbs/yr)	Amount of "Worst Case" HAPs Emissions From Gasoline (lbs/yr)	Amount of "Worst Case" HAPs Emissions From Gasoline Before Controls (tons/yr)	VOC Emissions From Gasoline After Gasoline Limitation (lbs/yr)	HAPs Emissions From Gasoline After Gasoline Limitation (lbs/yr)	HAPs Emissions From Gasoline After Gasoline Limitation Before Controls (tons/yr)	Overall Control Efficiency	HAPs Emissions From Gasoline After Gasoline Limitation After Controls (tons/yr)
2,2,4- Trimethylpent.	0.953%	12929760	123240	61.6	2511250	23936	12.0	96.42%	0.428
Benzene	0.625%	12929760	80861	40.43	2511250	15705	7.85	96.42%	0.281
Biphenyl	0.001%	12929760	84.0	0.042	2511250	16.3	0.008	96.42%	0.0003
Cresole	1.565%	12929760	202351	101.18	2511250	39301	19.65	96.42%	0.703
Cumene	0.016%	12929760	2024	1.012	2511250	393	0.197	96.42%	0.007
Ethyl benzene	0.063%	12929760	8163	4.081	2511250	1585	0.793	96.42%	0.028
n-Hexane	4.428%	12929760	572479	286.2	2511250	111188	55.6	96.42%	1.99
MTBE	2.240%	12929760	289627	144.8	2511250	56252	28.1	96.42%	1.007
Napthalene	0.006%	12929760	71.1	0.036	2511250	13.81	0.007	96.42%	0.0002
Phenol	0.0001%	12929760	14.2	0.007	2511250	2.76	0.001	96.42%	0.00005
Styrene	0.0882%	12929760	11400	5.700	2511250	2214	1.107	96.42%	0.040
Toluene	0.842%	12929760	108885	54.44	2511250	21148	10.57	96.42%	0.379
Xylene	0.235%	12929760	30386	15.19	2511250	5902	2.95	96.42%	0.106
		<b>Total HAPs:</b>	<b>1429585</b>	<b>714.8</b>	<b>Total HAPs:</b>	<b>277658</b>	<b>138.8</b>		<b>4.97</b>

HAP	Worst Case Weight % in Jet Kerosene vapor	VOC Emissions From Jet Kerosene After Gasoline Limitation (lbs/yr)	HAPs Emissions From Jet Kerosene After Gasoline Limitation (lbs/yr)	HAPs Emissions From Jet Kerosene After Gasoline Limitation Before Controls (tons/yr)	Overall Control Efficiency	HAPs Emissions From Jet Kerosene After Gasoline Limitation After Controls (tons/yr)
2,2,4- Trimethylpent.	0.327%	16148	52.8	0.026	80.00%	0.005
Benzene	2.149%	16148	347	0.174	80.00%	0.035
Biphenyl	0.001%	16148	0.140	0.00007	80.00%	0.000
Cresole	0.381%	16148	61.5	0.031	80.00%	0.006
Cumene	0.194%	16148	31.3	0.016	80.00%	0.003
Ethyl benzene	0.892%	16148	144	0.072	80.00%	0.014
n-Hexane	22.822%	16148	3685	1.843	80.00%	0.369
Napthalene	0.080%	16148	12.8	0.006	80.00%	0.001
Phenol	0.0139%	16148	2.24	0.0011	80.00%	0.000
Toluene	6.003%	16148	969	0.485	80.00%	0.097
Xylene	2.910%	16148	470	0.235	80.00%	0.047
		<b>Total HAPs:</b>	<b>5776</b>	<b>2.89</b>		<b>0.578</b>

**Flanges, Pumps, Valves, and Others Potential to Emit**

Fugitive Source	Emission Factor (lbs/day)	Number Leaking	Fugitive Emissions (lbs/day)	Fugitive Emissions (tons/yr)
Valves	0.0023	110	0.251	0.046
Flanges	0.0286	20.0	0.571	0.104
Pump Seals	0.0004	400.0	0.168	0.031
Other	0.0069	30.0	0.206	0.038
		<b>Total VOC:</b>	<b>1.20</b>	<b>0.218</b>

**Oil/Water Separator Potential To Emit**

Throughput (kilogallons/year)	Emission Factor (lbs/kilogallon)	VOC Emissions (lbs/year)	VOC Emissions (tons/year)
500	0.2	100	<b>0.050</b>

Emissions are controlled based AP-42 Table 5.1-2

## Appendix A: Emission Calculations Emissions From Combustion

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**Company Name:** Buckeye Terminals, LLC - South Bend Terminal  
**Address City IN Zip:** 20630 West Ireland Road, South Bend, Indiana 46614  
**FESOP:** 141-15854  
**Plt ID:** 141-00139  
**Reviewer:** Michael S. Schaffer  
**Application Date:** July 12, 2002

### Vapor Combustion Unit (VCU) Potential To Emit From Fuel Throughputs

NOx Emission Factor (lbs/1000gal)	Total Maximum Annual Fuel Throughput (gallons)	NOx Emissions (lbs/yr)	NOx Emissions (tons/yr)
0.0835	1261440000	105330	52.7

CO Emission Factor (lbs/1000gal)	Total Maximum Annual Fuel Throughput (gallons)	CO Emissions (lbs/yr)	CO Emissions (tons/yr)
0.0334	1261440000	42132	21.1

### Methodology

Emission Factors are based on manufacturer's specifications for the VCU

(Emission Factor (lbs/1000gal) \* Total Maximum Annual Throughput (gallons)) / 1000 gallons = Emissions (lbs/yr) / 2000 (lbs/ton) = Emissions (tons/yr)

Total Maximum Annual Throughput (gallons/yr) = 8 loading arms \* 600 gallons/min \* 60 min/hr \* 4380 loading hours per year

### Total Natural Gas-Fired Combustion Emissions

Two (2) Space Heaters Rated at 0.080 mmBtus/hr

One (1) VCU rated at 0.055 mmBtus/hr

Heat Input Capacity: 0.215 mmBtu/hr

Potential Throughput: 1.88 mmcf/yr

Pollutant	Emission Factors (lbs/mmcf)	Emissions (lbs/yr)	Potential Emissions (tons/yr)
PM	1.90	3.58	0.002
PM-10	7.60	14.3	0.007
SO2	0.60	1.13	0.001
NOx	100.00	188	0.094
VOC	5.50	10.4	0.005
CO	84.00	158	0.079

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs Emissions are Negligible



**Appendix A: Emission Calculations  
Limited and Control Emissions Summary**

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**Company Name:** Buckeye Terminals, LLC - South Bend Terminal  
**Address City IN Zip:** 20630 West Ireland Road, South Bend, Indiana 46614  
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**VOC Emissions including Limits and Controls**

Tank#	Potential to Emit VOC (lbs/year)	Potential to Emit VOC (tons/year)	VOC Control Efficiency	Potential to Emit VOC after control (lbs/year)	Potential to Emit VOC after control (tons/year)
701	11080	5.540	0.00%	11080	5.54
702	10600	5.300	0.00%	10600	5.30
704	6380	3.19	0.00%	6380	3.19
711	11380	5.69	0.00%	11380	5.69
712	6380	3.19	0.00%	6380	3.19
714	6380	3.19	0.00%	6380	3.19
722	24800	12.400	0.00%	24800	12.4
703	338	0.169	0.00%	338	0.169
732	1861	0.931	0.00%	1861	0.931
100	500	0.250	0.00%	500	0.250
101	500	0.250	0.00%	500	0.250
102	1866	0.933	0.00%	1866	0.933
103	1866	0.933	0.00%	1866	0.933
Loading Racks (gasoline or Denatured Ethanol)	2511250	1256	96.42%	89903	45.0
Loading Racks (Jet Kerosene or other Distillates)	16148	8.07	80.00%	3230	1.61
Pumps	91.6	0.046	0.00%	91.6	0.046
Flanges	208.4	0.104	0.00%	208	0.104
Valves	61.3	0.031	0.00%	61.3	0.031
Other	2.52	0.001	0.00%	2.52	0.001
Oil/Water Separator	100	0.050	0.00%	100	0.050
Combustion	10.4	0.005	0.00%	10.4	0.005
<b>Total:</b>	<b>2611693</b>	<b>1306</b>		<b>177427</b>	<b>88.7</b>

**Gasoline HAP Emissions**

HAP	Tank HAP Emissions from Gasoline (lbs/yr)	Worst Case HAP Emissions (tons/yr)	Loading Rack HAP Emissions from Gasoline (lbs/yr)	Loading Rack HAP Emissions (tons/yr) Before Control	Loading Rack HAP Emissions (tons/yr) After Control	Entire Source gasoline HAP Emissions (tons/yr) After Control
2,2,4- Trimethylpent.	734	0.367	23936	12.0	0.428	0.795
Benzene	481	0.241	15705	7.85	0.281	0.522
Biphenyl	0.500	0.0003	16.3	0.01	0.0003	0.001
Cresole	1205	0.602	39301	19.65	0.703	1.306
Cumene	12.0	0.006	393	0.20	0.007	0.013
Ethyl benzene	48.6	0.024	1585	0.79	0.028	0.053
n-Hexane	3408	1.70	111188	55.59	1.99	3.694
MTBE	1724	0.862	56252	28.13	1.01	1.87
Napthalene	0.423	0.0002	13.8	0.01	0.0002	0.000
Phenol	0.085	0.0000	2.76	0.001	0.00005	0.00
Styrene	67.9	0.034	2214.00	1.11	0.040	0.074
Toluene	648	0.324	21148	10.57	0.379	0.703
Xylene	181	0.090	5902	2.95	0.106	0.196
<b>Total HAPs:</b>		<b>4.26</b>	<b>277657</b>	<b>138.8</b>	<b>4.97</b>	<b>9.23</b>

**Jet Kerosene HAP Emissions**

HAP	Tank HAP Emissions from Jet Kerosene (lbs/yr)	Worst Case HAP Emissions (tons/yr)	Loading Rack HAP Emissions from Jet Kerosene (lbs/yr)	Loading Rack HAP Emissions (tons/yr) Before Control	Loading Rack HAP Emissions (tons/yr) After Control	Entire Source Jet Kerosene HAP Emissions (tons/yr) After Control
2,2,4- Trimethylpent.	7.19	0.004	52.8	0.026	0.005	0.009
Benzene	47.3	0.024	347	0.174	0.035	0.058
Biphenyl	0.019	0.00001	0.140	0.0001	0.00001	0.00002
Cresole	8.40	0.004	61.5	0.031	0.006	0.010
Cumene	4.27	0.002	31.30	0.016	0.003	0.005
Ethyl benzene	19.6	0.010	144.0	0.072	0.014	0.024
n-Hexane	502	0.25	3685	1.843	0.369	0.619
Napthalene	1.75	0.0009	12.80	0.006	0.001	0.002
Phenol	0.305	0.0002	2.240	0.0011	0.00022	0.0004
Toluene	132	0.066	969	0.485	0.097	0.163
Xylene	64.0	0.032	470.0	0.235	0.047	0.079
<b>Total HAPs:</b>		<b>0.393</b>	<b>5776</b>	<b>2.89</b>	<b>0.578</b>	<b>0.971</b>

**Denatured Ethanol and Fuel Additive Emissions**

HAP	HAP Emissions from denatured ethanol (lbs/yr)	Worst Case HAP Emissions (tons/yr)	HAP Emissions from Fuel Additive (lbs/yr)	Worst Case HAP Emissions (tons/yr)	Entire Source denatured ethanol and diesel HAP Emissions (tons/yr)
2,2,4- Trimethylpent.	35.6	0.018	0.000	0.000	0.018
Benzene	23.3	0.012	200	0.100	0.112
Biphenyl	0.024	0.000	0.000	0.000	0.000
Cresole	58.4	0.029	0.000	0.000	0.029
Cumene	0.584	0.000	0.000	0.000	0.000
Ethyl benzene	2.36	0.001	0.000	0.000	0.001
n-Hexane	165	0.083	0.000	0.000	0.083
MTBE	83.6	0.042	0.000	0.000	0.042
Napthalene	0.021	0.000	0.000	0.000	0.000
Phenol	0.004	0.000	0.000	0.000	0.000
Styrene	3.29	0.002	0.000	0.000	0.002
Toluene	31.4	0.016	0.000	0.000	0.016
Xylene	8.77	0.004	100	0.050	0.054
<b>Total HAPs:</b>	<b>413</b>	<b>0.206</b>	<b>300</b>	<b>0.150</b>	<b>0.356</b>

Entire Source HAP Emissions (tons/yr) After Control
0.822
0.692
0.001
1.35
0.019
0.078
4.40
1.91
0.003
0.000
0.075
0.88
0.329
10.55